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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,784	11/13/2001	Christopher A. Wiklof	1788-22-3	1821

7590 03/16/2004

GRAYBEAL JACKSON HALEY LLP  
155-108th Avenue N.E., Suite. 350  
Bellevue, WA 98004-5901

EXAMINER
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ALLEN, DENISE S

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/007,784	Applicant(s) WIKLOF ET AL.	
	Examiner Denise S Allen	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2003 and 29 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

The formal drawings were received on December 19, 2003. These drawings are acceptable to the Examiner.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 – 32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 – 9, 21 – 25, and 30 – 35 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The structural elements of the beam-reflector assembly that sweep the scan beam in response to the first magnetic force only (claims 1, 21, and 33), critical or essential to the practice of the invention, but not included in the claim(s) are not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). A single magnetic force alone is insufficient to cause sweeping of a scan beam. Some structure is required to translate the magnetic force into the proper sweeping motion. The Applicant indicate the criticality of using only one magnetic force to activate the scan beam sweep in the response received December 19, 2003 (page 9 lines 9 – 26).

Claims 10 – 20, 26 – 29, 36, and 37 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure that is not enabling. The structural elements of the beam-reflector assembly

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that rotate the mirror back and forth in response to a repelling magnetic force (claims 10, 15, 26, and 36), critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). A single magnetic (repelling) force alone is insufficient to cause rotation back and forth of a mirror. Some structure is required to translate the magnetic force into the proper rotating motion. The Applicant indicates the criticality of using a repelling magnetic force to rotate the mirror back and forth in the response received December 19, 2003 (page 9 lines 9 – 26).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

Claims 1 – 37 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: structural elements that translate magnetic force into rotating/sweeping motion (see above).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 3, 5, and 21 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dvorkis et al.

Regarding claims 1 and 21, Dvorkis et al teaches a scanner (Figure 5), comprising: a beam generator (reference 147) operable to generate a scan beam (from reference 147 to

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reference 129); a beam-reflector assembly (references 121 and 129) having a first magnet (reference 135) and operable to sweep the scan beam (reference w); and a beam-sweep mechanism (references 131 and 145) having a second magnet (reference 131) and operable to activate the beam-reflector assembly by exerting a first magnetic force and only the first magnetic force on the first magnet (column 9 lines 41 – 46). Dvorkis et al does not teach the second magnet is a permanent magnet, but rather an electromagnet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the electromagnet of Dvorkis et al with a movable permanent magnet in order to reduce the electrical requirements of the scanner.

Regarding claim 2, Dvorkis et al teaches the beam generator comprises a laser diode (reference 147).

Regarding claims 3 and 22, Dvorkis et al teaches a beam detector operable to read a return beam reflected from a target (column 5 lines 44 – 48).

Regarding claims 5 and 23, Dvorkis et al teaches the beam-sweep mechanism causes the beam-reflector assembly to rotate back and forth by exerting the first magnetic force on the first magnet with the second magnet (column 9 lines 41 – 46).

### ***Conclusion***

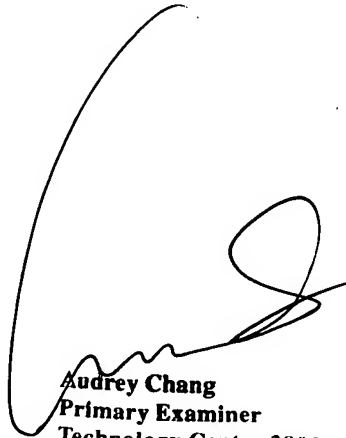
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise S Allen whose telephone number is (571) 272-2305. The examiner can normally be reached on Monday - Friday, 9:00am - 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Denise S Allen  
Examiner  
Art Unit 2872

  
dsa  
**Audrey Chang**  
Primary Examiner  
Technology Center 2800